

Washington State Product Stewardship Plan Content Guidelines for Mercury-Containing Light Product Stewardship Program

Product Stewardship Plans for collection, transportation and recycling of residential mercury-containing lights are required under Washington law (Chapter 70.275 RCW). The Washington State Department of Ecology (Ecology) is required to oversee and enforce this law. The law provides two product stewardship program options:

- Ecology contracted product stewardship program.
- Independent program approved by Ecology.

This document is provided as a template that **must** be used for a product stewardship plan. This template is based on the required content of a Mercury-Containing Lights Product Stewardship Plan as set in statute (RCW 70.275.030). Ecology may later adopt rules necessary to implement, administer, and enforce this law (RCW 70.275.140). However, until rules are adopted, these guidelines are the definitive statement on what must be in product stewardship plans.

The following product stewardship plans may be used for reference as plans that are considered by Ecology to be informative and well written (URL links provided at the end of this document):

- [Standard Plan for Recycling Covered Electronic Products in Washington State](#)
- [Oregon Paint Stewardship Pilot Program Plan](#)
- [British Columbia Fluorescent Lamps Stewardship Plan](#)

Format of Plan Submittals

- **Draft plans** must be submitted in electronic format as a Word document (or other similar format) that allows document editing (in track changes) by Ecology.
- **Final, approved plans** must be submitted in both electronic (Word) and hard copy. The hard copy will be submitted in a three-ring binder, with separate tabbed numbered sections so that individual sections may be replaced as plans are updated. The hard copy will be double-sided on recycled content paper with no more than 1-inch margins.

Product Stewardship Plan schedule and submittal

- As required by law, plans beginning implementation on or before January 1, 2013 must be submitted to Ecology no later than January 1, 2012 (RCW 70.275.030).
- Plan update submittals are required two years after start up and once every four years thereafter.

What to submit:

- **Draft Plan:** one electronic copy in Word format, email to kara.steward@ecy.wa.gov.
- **Final, Approved Plan:** one paper copy (in a 3-ring binder) and one electronic copy (in Word format) of the plan must be submitted to Ecology.

Where to send the hard copy:

U.S. Postal Service:

Department of Ecology
Mercury Light Product Stewardship
Waste 2 Resources Program
P.O. Box 47600
Olympia, WA 98504-7600

Courier:

Department of Ecology
Mercury Light Product Stewardship
Waste 2 Resources Program
300 Desmond Drive
Lacey, WA 98503

Send an electronic copy to kara.steward@ecy.wa.gov

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Note: Ecology may later adopt rules for plan and reporting requirements. Until that time, these guidelines are the definitive requirements on plan content. After rules are adopted, the guidelines will be revised in accordance with the rules.

Document updates will be posted on Ecology's [Mercury Lights Product Stewardship](#) website.

Mercury-Containing Lights Product Stewardship Program Responsibilities:

A. Producer responsibilities:

- As of January 1, 2013, no producers, wholesaler, retailer, electric utility, or other person may distribute, sell or offer for sale mercury-containing lights for residential use to any person in this state unless the producer is participating in a product stewardship program under a plan approved by Ecology.
- Producers must fully finance the product stewardship program including Ecology's costs for administering and enforcing the program.
- The product stewardship program must pay all administrative and operational costs associated with their program, including collection, transport, and recycling of mercury-containing lights.
- There are two options for participating in a product stewardship program:
 - Participate in a plan approved by Ecology and operated by a state contracted product stewardship organization, or
 - Operate, either individually or jointly, a product stewardship program approved by Ecology.
- Product stewardship programs must recover their fair share of unwanted covered products. The plan must describe how the program determines that their fair share of mercury-containing lights is collected.
- Producers must comply with Ecology guidelines and rules. When rules are adopted, guidelines will be revised in accordance with the rules.
- A Product Stewardship Organization, representing the producers participating in the plan, may take on Producer(s) responsibilities detailed in the guidelines.

B. Ecology responsibilities:

- Administer and enforce the mercury-containing lights product stewardship program law, including review and approval of product stewardship program plans.
- Provide guidelines where the law lacks sufficient detail. Adopt rules where necessary to implement, administer, and enforce this law. When rules are adopted, guidelines will be revised in accordance with the rules. Provide a timeline for rule compliance if there is a conflict between guidelines and later rules.
- Post agency guidelines and producer plans on the [Mercury Lights Product Stewardship](#) website for public review and comment. Public review and comment of producer plans will be incorporated into the 60-day Ecology review period.
- Determine the fair share of unwanted covered products for each approved plan. If there is more than one approved plan, producers must provide Ecology with sufficient information to allow determination of each programs fair share. Once the process for

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establishing fair share is determined, Ecology may require additional information from the producers. That information could be provided in the plan, in annual reports, or through an alternate process.

Mercury-Containing Lights Product Stewardship Program Plan Content

A product stewardship plan must sufficiently detail and explain items 1 through 13.

1. Overall Program Plan Requirements

The plan must include the following:

- Names and contact information for all participating producers, including brand names.
- If a product stewardship organization will manage the program, the plan must provide details on what the management and organization of the product stewardship organization and program will look like.
- A binding agreement that contains a statement that the producers participating in the product stewardship plan will comply with the terms and conditions of the plan when it is approved by Ecology.
- The binding agreement must also contain a statement that if the plan fails to meet the producers' obligations under Chapter 70.275 RCW, the producers retain responsibility and liability, including financial liability, for the collection, transportation and recycling of their fair share of mercury-containing lights.
- The binding agreement must be signed and dated by all producers participating in the product stewardship plan.

2 - Participant Assessment of Charges or Apportionment of Costs

The plan must include a proposal for assessing charges and apportioning costs for producers participating in the plan. The plan must also include a description of the information or data used to determine the charges assessed or costs apportioned to producers participating in the plan.

The plan will also describe how providers of mail back and curb side collection propose to charge fees to cover those collection services.

3 – Use of Washington State Businesses

The plan must include a description of how the Producer(s) will seek to use businesses within Washington State to implement the product stewardship program. These in-state businesses include transporters, collection sites and services, retailers, curbside collection services, and processing and recycling facilities in Washington State. Although the producer is not required to use Washington businesses to implement the program, producers should use best efforts in working with Washington State businesses in order to create a robust product stewardship and recycling program.

4 - Collection Services

The plan must include a description of how the Producer(s) will work with local government entities responsible for preparing local Solid Waste Management Plans to provide reasonably convenient collection service in each county, as well as in every city with a population of 10,000 or more. The Producer(s) may not prohibit any retailers or other collectors currently providing

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collection service from participating in the product stewardship program. Also required in the plan is a description of how the plan will meet the collection service requirements in RCW 70.275.010, including, but not limited to:

- Work with local government officials to determine what “convenient” collection service means in rural areas.
- Identify how collection service will be provided in each county and each qualifying city.
- Develop a detailed description of any proposed alternatives to collection sites.
- Describe the consideration given to existing residential curbside collection infrastructure and mail-back systems as appropriate collection mechanisms.
- Identify and communicate in writing with each prospective local government and retail collection site which is not approved to participate in the program and the basis for not allowing program participation. Provide copies to Ecology of all written correspondence related to prospective collection sites that were not approved. Notify Ecology, within five days of approval or denial of a prospective collection site, including their contact information, whether they have been approved for participation, and if denied, the reason for denial.
- Identify how quickly empty collection containers will be provided after a container is filled and shipped.
- Detail the communication and outreach process for collectors to answer questions, provide supplies, or provide technical assistance.
- Provide technical assistance to collection sites, including written instructions on how to participate in the program and how to appropriately handle and store mercury-containing lights in order to comply with Washington State Dangerous Waste regulations (Universal waste regulations detail management requirements for fluorescent lamps in WAC 173-303-573 – or review Ecology publication <http://www.ecy.wa.gov/pubs/98407c.pdf>).

Universal Waste management requirements for mercury-containing lights:

- Store lamps in closed, sealable containers and keep them inside.
- Clean up spills immediately.
- Track lamp accumulation to show lamps not accumulated longer than 1 year.
- Use a “universal waste lamp” label (other labels can be “waste lamps” or “used lamps” but “universal waste lamp” is best as it clearly indicates that they are being managed under that rule).
- Send lamps to another universal waste handler or to a universal waste destination facility.

A collection facility that has more than 2,200 pounds of lamps on their site at one time would be a large quantity handler of lamps. Large quantity handlers have an EPA ID # and submit an annual report to Ecology.

5 – Collectors

Collectors of mercury-containing lights include curbside collection activities, household hazardous waste facilities, and other registered drop-off locations. Drop-off locations must register with Ecology. Registration may occur at any time before the plan is approved or after the

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program is implemented. Ecology and the Producer(s) will share the names, addresses, and contact information for all collection sites, including registered drop-off locations.

Mercury-containing lights may be collected at, but are not limited to:

- Drop-off locations: non-profit (charities, utilities) or for-profit (retail, recyclers) sites.
- Local government collection sites: household hazardous waste and moderate risk waste facilities.
- Curbside collection programs.
- Mail-back programs.

Collection locations: The plan must include the following collection site information:

- Legal name of the person or entity owning and operating the collection site.
- Address and phone number of the collection site.
- Name, address, and phone number of the individual responsible for operating the collection site.
- Days and hours of operation for each collection site.
- Types of mercury-containing lights accepted at each site. The plan will include an equal number of sites for collection of compact fluorescent lamps (CFLs) and fluorescent tubes.
- Describe minimum standards for a spill and release response plan.
- Describe minimum standards for a worker safety plan.
- Describe standards for handling mercury-containing lights as universal waste.
- Require that collectors do not charge for drop off of covered lights.
- Require collectors to store lights to prevent breakage and provide protection from the weather.
- Describe the use of packaging and shipping materials that will minimize breakage, the use of mercury vapor packaging if mercury-containing lights are transported by the United States Postal Service or common carrier, and how the collection program will prevent breakage and contain the release of mercury from any bulbs that do break.

Curbside or mail back collection: The plan must include details of curbside collection or mail-back programs including:

- Name, address, and phone number of the individual responsible for operating the curbside or mail-back program.
- Details of the operation of the curbside or mail-back programs.
- Types of mercury-containing lights accepted.
- Require mercury-containing lights be stored during collection to prevent breakage and provide protection from weather.
- Details of how the mercury-containing lights are packaged and transported from the curbside collection or mail-back programs, including how the collection program will prevent breakage and contain the release of mercury from any bulbs that do break.

The plan will explain how the collectors will minimize and manage mercury-containing lights not accepted by the product stewardship program.

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6 – Transporters

The plan must include the following information about the transportation services for the plan:

- Transporter identification.
- Counties and cities where the transporter provides service for the plan.
- Types of mercury-containing lights transported.
- Identification of transportation system used for existing residential curbside collection.
- Identification of transportation system used for mail-back collection.
- Detail how the transporters demonstrate that they can transport mercury-containing lights to prevent breakage and provide protection from weather.
- Type of packaging used when shipping through the US Postal Service or by common carrier.
- Verification that all transporters are authorized by the WA Utilities and Transportation Commission to transport goods in the state of Washington.
- Transporters must register with Ecology as a transporter of recyclable materials. More information on this registration process is available at <http://www.ecy.wa.gov/programs/swfa/transporter/>.
- Transporters must comply with requirements for universal waste transporters in WAC 173-303-573, Subsections (28) through (34).

7 – Recycling Facilities

Mercury-containing lights collected by the product stewardship program must be recycled. The plan must include the following information about recyclers of mercury-containing lights participating in the plan:

- Recycling facility name, operator, address, phone, email.
- Physical location of the recycling facilities.
- Contact information and mailing addresses for all recycling facilities.
- Types of mercury-containing lights processed at each recycling facility.
- Describe how mercury and other hazardous substances will be handled through final disposition. This would include information about how mercury will be separated from other materials, where and how it will be retorted, how it will be handled safely through final disposition, Mercury recovered from retorting must be recycled or placed in a properly permitted mercury repository.
- A description of all processes and methods used to recycle mercury-containing lights.
- Names and addresses of companies the recycling facilities would subcontract to aid in the processing of the mercury-containing lights
- Certification that federal or state prison labor is not used for processing mercury-containing lights.
- Recycling facilities must comply with requirements for universal waste destination facilities in WAC 173-303-573, subsections (35) through (37).

8 – Recycling Facility Compliance Audit:

Ecology or its designee may inspect, audit, or review audits of processing and disposal facilities used to fulfill the requirements of a product stewardship program. Compliance audits must be included for each mercury-containing light recycling facility proposed by a plan. The audit will evaluate legal requirements relating to:

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- Waste and recyclables processing, storage, handling, and shipping.
- Proper handling and disposal of solid and hazardous wastes.
- Air emissions and waste water discharge, including storm water discharges.
- Worker health and safety.
- Movement of equipment, components, materials, waste, or scrap for reuse, recycling, or disposal across state or international boundaries.
- Certify that federal or state prison labor is not used for processing unwanted products.
- The audit will include all downstream companies that handle mercury and other hazardous substances.

9 – Fair Compensation

The plan must detail how producers will finance the cost of collection, transportation, and processing of mercury-containing lights collected across the state. This includes a timeframe agreed upon for payment to the collectors, transporters, and recyclers.

- Collectors: The plan will establish the amount to be reimbursed for collection of mercury-containing lights (“cost of collection”).
- Transporters: The plan will fully fund this cost.
- Recyclers: The plan will fully fund this cost.

10 – Recordkeeping

The plan must include a description of the procedures to be used to collect data and maintain records to meet and demonstrate compliance with the requirements of Chapter 70.275 RCW. This must include a description of the accounting and reporting systems that will be used to track progress. At a minimum, the Producer(s) will track the following data:

- Sales of mercury-containing lights sold in or into the state for all producers participating in the plan. These data will represent sale of lights collected by the program, including lamps, bulbs, tubes, or other devices that contain mercury and provide functional illumination in homes, businesses, and outdoor stationary fixtures.
- List of collection sites and collection services (curbside and mail-back) across the state.
- Identification of recycling facilities.
- Mercury-containing lights collected, transported, and recycled.
- Types of mercury-containing lights collected.
- Lights collected from individual collection sites and collection services (curbside and mail-back).
- Final destination and quantities by weight of the recycled portion of the lights and disposed portion.
- Education efforts for consumers, retailers, collectors, transporters, and recyclers.
- Efforts to promote the mercury-containing light collection program.
- Provide a detailed breakdown of the number or percentage of lights collected by collection site, curbside, mail back, event, or other.

11 – Implementation Timeline

The plan shall include a timeline showing when each of the following will occur and a detailed description of each activity:

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- Start-up of the collection and recycling efforts.
- Implementation milestones.
- Education efforts for consumers, retailers, collectors, transporters, and recyclers.
- Promotion efforts for the mercury-containing light collection program.
- Progress toward milestones with anticipated results.

12 – Education, Public Outreach, and Marketing

The plan must describe how the Producer(s) will inform the public and other covered entities about where and how to recycle their mercury-containing lights. All education and outreach materials must be submitted to Ecology for review and approval prior to use of the materials in Washington State. The plan must also include a description of the educational materials to be used at collection sites, including retail collectors. This must include:

- The method(s) to be used to inform the public about recycling the lights.
- How the plan will conduct outreach throughout the state.
- Describe point of purchase signs and other materials provided to retail establishments, without cost, that will inform consumers of light recycling. The plan will encourage retailers to post point of purchase signs to promote the program.
- Detail how the education and outreach program will be effective. This could include a maintained, accurate and current web site, point of sale signs and other materials provided to collection sites (prior to program start) without cost, and print advertisements biannually in the major newspapers in Washington.
- Describe how input and feedback about the design of point of sale materials from all collection sites will be obtained and included.

By January 2, 2013, producers will submit to Ecology for review and approval a proposed program evaluation, including goals for consumer awareness of the requirement to recycle mercury-containing lights and collection locations, provisions for routinely evaluating the effectiveness of education and outreach efforts, and procedures for improving education and outreach efforts if the goals are not achieved.

13 – Annual Reporting

The plan must detail the content to be submitted in annual reports to Ecology. Each annual report is due to Ecology by April 1 for the prior calendar year. The annual report must describe the results of implementing the plan for the prior year. Annual reports submitted to Ecology will be made available for public review on Ecology's web site and at Ecology's headquarters.

Ecology will provide additional guidance detailing the information required in the annual reports. For planning purposes, annual report content will include, at a minimum:

- Number of mercury-containing lights recycled under the program.
- Estimated percentage of mercury-containing lights available for recycling based on Washington State sales data that were recycled under the program and the methodology for estimating the number of mercury-containing lights available for recycling.
- An evaluation of the effectiveness of the program, including goals and provisions for routinely evaluating the effectiveness of the education and outreach efforts, procedures for improving education and outreach efforts if the goals are not achieved.

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- Recommendations for increasing the number of lamps recycled under the recycling program.
- An accounting of the ongoing operational costs directly associated with administering and implementing the mercury lighting lamp recycling program.

Note: Ecology may later adopt rules for plan and reporting requirements. Until that time, these guidelines are the definitive requirements on plan content. After rules are adopted, the guidelines will be revised in accordance with the rules.

Document updates will be posted on Ecology's [Mercury Lights Product Stewardship](#) website.

Select definitions from RCW 70.275.020

- "Collection" or "collect" means, except for persons involved in mail-back programs:
 - (a) The activity of accumulating any amount of mercury-containing lights at a location other than the location where the lights are used by covered entities, and includes curbside collection activities, household hazardous waste facilities, and other registered drop-off locations; and
 - (b) The activity of transporting mercury-containing lights in the state, where the transporter is not a generator of unwanted mercury-containing lights, to a location for purposes of accumulation.
- "Covered entities" means:
 - (a) A single-family or a multifamily household generator and persons that deliver no more than fifteen mercury-containing lights to registered collectors for a product stewardship program during a ninety-day period; and
 - (b) A single-family or a multifamily household generator and persons that utilize a registered residential curbside collection program or a mail-back program for collection of mercury-containing lights and that discards no more than fifteen mercury-containing lights into those programs during a ninety-day period.
- "Mail-back program" means the use of a prepaid postage container with mercury vapor barrier packaging that is used for the collection and recycling of mercury-containing lights from covered entities as part of a product stewardship program and is transported by the United States postal service or a common carrier.
- "Mercury-containing lights" means lamps, bulbs, tubes, or other devices that contain mercury and provide functional illumination in homes, businesses, and outdoor stationary fixtures.
- "Person" means a sole proprietorship, partnership, corporation, nonprofit corporation or organization, limited liability company, firm, association, cooperative, or other legal entity located within or outside Washington state.
- "Product stewardship" means a requirement for a producer of mercury-containing lights to manage and reduce adverse safety, health, and environmental impacts of the product throughout its life cycle, including financing and providing for the collection, transporting, reusing, recycling, processing, and final disposition of their products.
- "Product stewardship plan" or "plan" means a detailed plan describing the manner in which a product stewardship program will be implemented.
- "Product stewardship program" or "program" means the methods, systems, and services financed and provided by producers of mercury-containing lights generated by covered entities that addresses

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product stewardship and includes collecting, transporting, reusing, recycling, processing, and final disposition of unwanted mercury-containing lights, including a fair share of orphan products.

- "Stewardship organization" means an organization designated by a producer or group of producers to act as an agent on behalf of each producer to operate a product stewardship program.

See the entire content of Chapter 70.275 RCW at: <http://apps.leg.wa.gov/rcw/default.aspx?cite=70.275>

URL links mentioned or referenced in this guidance document:

- Standard Plan for Recycling Covered Electronic Products in Washington State
<http://www.ecy.wa.gov/programs/swfa/eproductrecycle/docs/StandardPlanBaseDocument2009.pdf>
- Oregon Paint Stewardship Pilot Program Plan
www.deq.state.or.us/lq/pubs/docs/sw/PaintProdStewardshipPilotPlan2010June.PDF
- BC Fluorescent Lamps Stewardship Plan
<http://www.env.gov.bc.ca/epd/recycling/electronics/pdf/BCFLSP-plan-feb03.pdf>
- Ecology Mercury Lights Product Stewardship website
<http://www.ecy.wa.gov/programs/swfa/mercurylights/>
- Ecology publication: The Universal Waste Rule for Lamps (WAC 173-303-573(5))
<http://www.ecy.wa.gov/pubs/98407c.pdf>

For questions about the mercury-containing lights product stewardship program, contact:

Kara Steward
kara.steward@ecy.wa.gov
(360) 407-6250

Washington State Department of Ecology
PO Box 47600
Olympia, WA 98504-7600

Visit the Mercury Lights Product Stewardship Program website

<http://www.ecy.wa.gov/programs/swfa/mercurylights/index.html>

Sign up for the Mercury Lights Product Stewardship Program listserv at

<http://listserv.wa.gov/cgi-bin/wa?A0=ECOLOGY-MERCURY-CONTAINING-LIGHT>